June 3, 1958 H. H. VON DER HELLEN 2,837,390

BRACKET FOR SLIDING TABLE TOP

Filed May 9, 1956

Fig. 1.

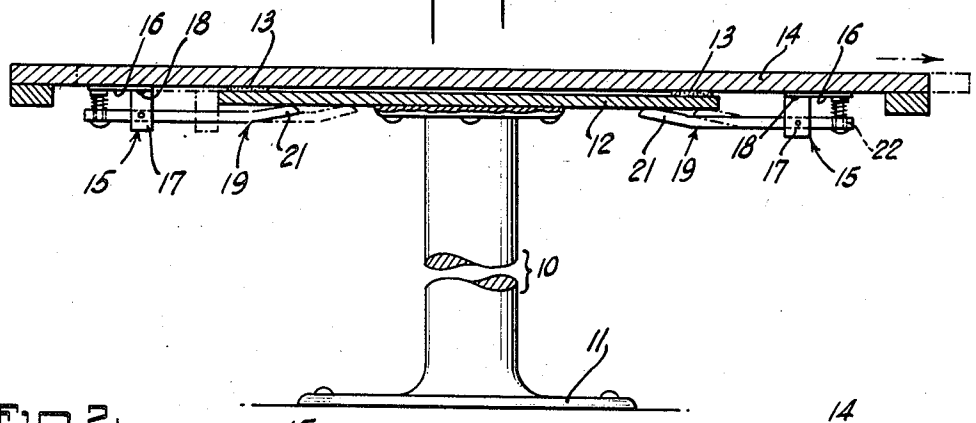


Fig. 2.

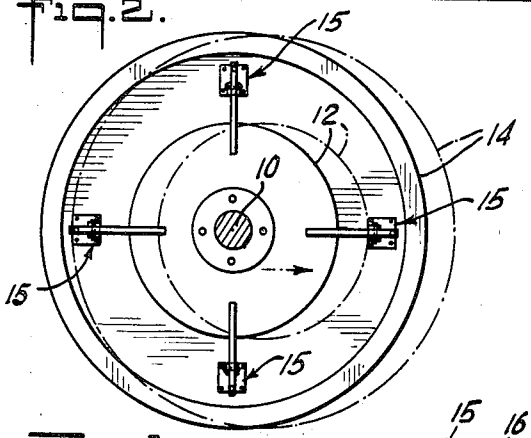


Fig. 3.

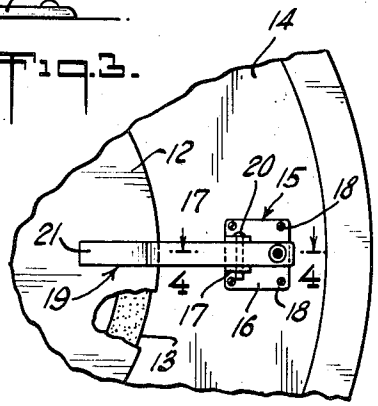


Fig. 6.

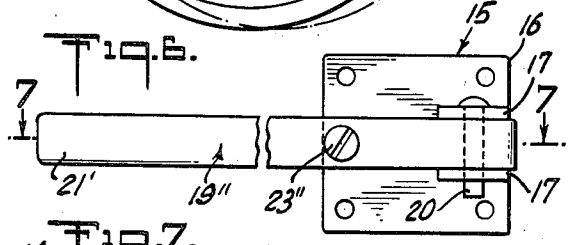


Fig. 4.

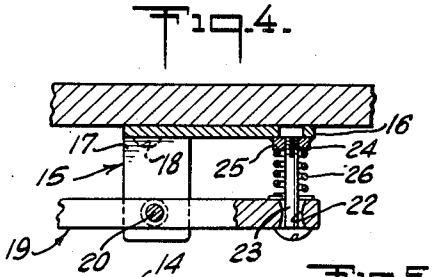


Fig. 7.

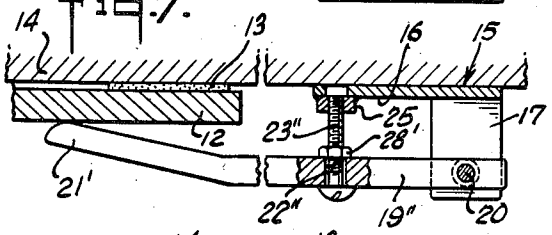


Fig. 5.

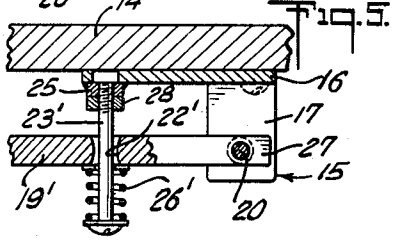
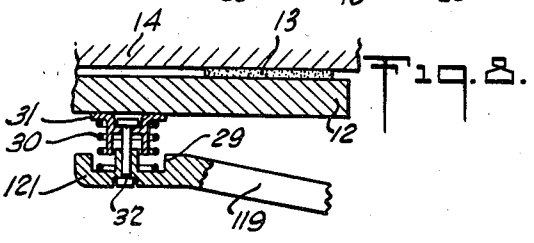


Fig. 8.



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BRACKET FOR SLIDING TABLE TOP

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4 Claims. (Cl. 311—35)

This invention broadly relates to a table construction such as used in eating places where it is essential to securely position a table structure by way of a fixed base attached to the floor and which base has a fixed table support for a table top which is slidably mounted upon said fixed table support so that the table top can be temporarily shifted to provide access to fixed seats intended for the table, whereupon the table top is replaced to its normal position.

More specifically this invention relates to clamping brackets designed to facilitate the sliding of the table top relative to the fixed table top support within certain limits so that the table top cannot slide off that support.

One of the objects of the present invention is the provision of a bracket structure for the purpose indicated and which structure is mountable at the undersurface of a sliding table top, and which bracket structure is provided with adjustable arms or fingers adapted to forcibly engage the undersurface of the table top support, and at the same time limit the movement of the table top relative to its support.

Another object of this invention is the provision of a bracket for the purpose indicated, which is simple and inexpensive in construction but effective in its application, and which bracket comprises a fixed base adapted for attachment to the undersurface of a slidable table top, and in which base is operatively mounted an arm extending from the base so that the free end of the arm forcibly engages the undersurface of the table top support, and wherein an adjusting element for that arm is provided to facilitate its correct engagement of the table top support.

A more specific object of this invention is the provision of a bracket for the purpose indicated, and which bracket comprises a fixed base having provisions for attaching it to the undersurface of a table top and from which base extend two spaced lugs, and wherein an arm is operatively mounted between the lugs and wherein a single fixed pivot passes through the lugs and the arm, and wherein an adjusting element for the arm is provided which passes through the arm and engages the base and is adjustable relative to the latter, whereby the correct adjustment of the arm in relation to the table support can be effected.

A further object of this invention is the provision in the bracket structure of spring means adapted to effect tensional and yielding engagement of the table top support by said arm.

The foregoing and still further objects and important advantages of the present invention will become more fully clarified by the ensuing description in conjunction with the accompanying drawings, wherein:

Fig. 1 is an elevation, partly in section, of a table structure in which a bracket of the present invention is employed;

Fig. 2 is a bottom view of the table structure in reduced size;

Fig. 3 is a detail bottom view of a bracket such as employed in Figs. 1 and 2;

Fig. 4 is a partial vertical cross section taken approximately along lines 4—4 of Fig. 3;

Fig. 5 is a section similar to that shown in Fig. 4 of a modified form of the bracket;

Fig. 6 is a plan view or bottom view of another modified form of the bracket;

Fig. 7 is a partial section along lines 7—7 of Fig. 6, but including a portion of a table top and a table support; and

Fig. 8 is a cross section of a modified form of the free end of a bracket arm.

In Figs. 1 and 2 numeral **10** denotes a vertical central column with a fixed base plate **11** for attachment to the floor and a fixed table top support **12**. At the top surface of support **12** are friction-reducing cushion elements **13**, see Fig. 1, upon which rests a mobile or sliding table top **14**. At the undersurface of the table top there are mounted several table top holding brackets generally indicated at **15**. In Fig. 2 four of such brackets are shown but of course their number may be either increased or decreased.

The preferred construction of a bracket is illustrated in Figs. 1, 3 and 4. That bracket essentially consists of three major parts, that is a fixed base, a holding arm and an adjusting element for the arm. The fixed base **16** comprises a plate from which extend two spaced lugs **17**. In the plate are provided suitable apertures for the reception of attaching screws **18**, by means of which the base is attached to the undersurface of sliding table top **14**.

Operatively mounted between lugs **17** is a finger or arm **19**. Through lugs **17** and arm **19** passes a fixed pivot **20** in the form of a pin or rivet which is preferably secured against detachment from the lugs. The free end **21** of arm **19** is adapted to forcibly engage the undersurface of fixed table top support **12**, while at its other end there is provided an aperture **22** for the passage therethrough of an adjusting element in the form of a bolt or screw **23** with a threaded end **24**. Plate **16** has a threaded extension **25** in which is operatively held the threaded end of adjusting element **23**. Interposed between base or plate **16** and arm **19** is a compression spring **26** adapted to cause free end **21** of the arm to tensionally but yieldably engage the undersurface of table top support **12**.

As will be observed from Figs. 1 and 2, brackets **15** are so disposed that they will permit sliding of table top **14** within certain limits but without permitting the table top to leave fixed support **12**. The dotted line position of the table top in Figs. 1 and 2, and of the brackets in Fig. 1 indicates the extreme position of the table top and of the brackets relative to the table top support.

In the preferred form shown in Figs. 1, 3 and 4 spring **26** urges the shorter leg of arm **19** away from plate **16**, whereby end **21** of arm **19** is forcibly urged against the undersurface of fixed table top support **12**.

In the modified form shown in Fig. 5 the position of the base is reversed so that lugs **17** are placed near the periphery of table top **14**. Arm **19'** is pivoted at its extreme end **27** and again is operative between lugs **17**. Aperture **22'** provided in the arm again accommodates an adjusting element **23'** which engages with its threaded end the plate projection **25**, but in addition there is provided a lock nut **28** to prevent movement of adjusting element **23'** after adjustment. Adjusting element **23'** is longer than adjusting element **23** shown in Fig. 4 so that a substantial portion of that element extends through aperture **22'** and beyond arm **19'**. Between the headed end of element **23'** and the arm there is provided a spring **26'** which urges the free end of the arm into tensional

and yielding engagement with the undersurface of the fixed table top support.

In Figs. 6 and 7 a third modification of the bracket is shown which is very similar in construction to that illustrated in Fig. 5. Here again from the base **16** extend two spaced lugs **17** and between the lugs is mounted arm **19''** which is supported by pivot **20** passing through lugs **17** and arm **19''**. This arm is again provided with an aperture **22''** adapted for the reception of an adjusting element **23''** which engages threaded end projection **25** extending from base or plate **16**. Adjusting elment **23''** is threaded over its entire length so that it can be set in its adjusted position by a lock nut **28'**, at which position the end **21'** of arm **19''** forcibly engages the undersurface of fixed table top support **12**. As will be noted in this construction, no spring is employed.

A modified end construction of arm **119** is shown in Fig. 8, wherein the end **121** of the arm is provided with a recess **29** for the reception of a spring **30**, the upper end of which bears against a substantially cup-shaped member **31** which is adapted to engage the undersurface of fixed table support **12**. A pin **32** limits the movement of cup **31** and therefore the action of spring **30**, and holds the spring and cup **31** against disengagement from arm end **121**. This end construction of the arm may be employed in conjunction with any of the bracket structures shown in Figs. 4, 5, 6 and 7, but of course its application is optional.

The foregoing description of the drawings showing various embodiments of the present invention is intended to facilitate its full understanding, but is by no means intended to in any way restrict the same to the exact structures shown and described. Obviously during the process of preparing the device for production, changes and modifications may be required, for which reason such changes and modifications essential to facilitate fabrication are deemed to reside within the scope of the present invention, as defined in the annexed claims.

What is claimed as new is:

1. A bracket for facilitating the movement and adjustment of a sliding table top relative to a fixed table top support, said bracket comprising a fixed base, having means to facilitate its immovable attachment to the underface of such table top, a pair of spaced lugs extending from the base and a mobile arm pivotally supported between and extending from the lugs, one of its ends being bent for forcibly engaging the undersurface of such top support, and an adjusting element for the other end of said arm passing through the latter and operatively lodged in said base, and wherein said base constitutes an attaching plate, said spaced lugs being located at one end of the plate, and said adjusting element being mounted at the opposite end of the plate, and wherein the other end of said arm has an aperture for the passage therethrough of said adjusting element, and wherein said plate has a threaded extension, said adjusting element having a threaded end for engaging said threaded extension to facilitate adjustment of said arm relative to said plate, and wherein means are provided for retaining said element in adjusted position, said retaining means constituting a lock nut and a coil spring for rendering the forcible engagement by said arm of the undersurface of such table top tensional and yieldable.

2. In a bracket structure for the purpose indicated, a fixed base having means for attaching it to the underface of a sliding table top resting upon a fixed support, said base comprising a plate and two spaced lugs depending therefrom, a mobile arm pivotally mounted between the lugs, one of its ends being curved upwardly to engage the undersurface of the fixed support, an adjusting element for said arm passing through an aperture provided in the arm and operatively engaging said plate, the latter having a threaded extension, said adjusting element having a threaded portion engaging said plate extension, and a spring for said arm for tensionally and yieldably urging that one end of the arm against the underface of the fixed support, and wherein said spring is mounted about said adjusting element and is interposed between said arm and said plate.

3. In a bracket structure according to claim 2, and wherein said adjusting element has a portion projecting through the arm aperture for a substantial distance, and wherein said spring is mounted about said projecting portion.

4. In a bracket structure according to claim 3, and wherein said spring is in the form of a resilient cushion mounted at that one end of the arm.

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